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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/637,574	08/14/2000	Eiichi Hase	NIT-218	8053

7590 03/07/2002

Mattingly Stanger & Malur PC
104 East Hume Avenue
Alexandria, VA 22301

EXAMINER
SEFER, AHMED N

ART UNIT	PAPER NUMBER
2826	

DATE MAILED: 03/07/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

NP

Office Action Summary	Application No.	Applicant(s)	
	09/637,574	HASE ET AL.	
	Examiner	Art Unit	
	A. Sefer	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *3,4,7,8,11,12,15 and 16* is/are allowed.

6)☒ Claim(s) *1,2,5,6,9,10,13 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyagawa et al. US Patent No. 4,890,155.

Miyagawa et al disclose (see figs. 1, 2 and 26 and abstract) a high frequency circuit module provided with two or more-layer dielectric substrate 6, 6b a semiconductor element and matching circuits on the input side 70 and on the output side 70 respectively of the semiconductor element respectively formed on the dielectric substrate, and ground metal 13 wherein: a thickness of the dielectric substrate between a conductor of conductor line 70b or transmission line (as in claim 5) of said matching circuit on the output side and said ground metal is composed of two or more layers.

As to claims 2 and 6, Miyagawa el al disclose a thickness of the dielectric substrate between a conductor of conductor line 70a or transmission line (as in claim 6) of said matching circuit on the input side and said ground metal is composed of two or more layers

3. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Fujita et al. US Patent No. 5,510,758.

Fujita et al disclose (see fig. 16 and col. 15, lines 50-53) a high frequency

circuit module provided with two or more-layer dielectric substrate 122, 125 a semiconductor element 130 and matching circuits on the input side 123 and on the output side 124 respectively of the semiconductor element respectively formed on the dielectric substrate, and ground metal 121, 128A wherein: a thickness of the dielectric substrate between a conductor of conductor line 124 or transmission line (as in claim 5) of said matching circuit on the output side and said ground metal is composed of two or more layers wherein the high frequency circuit module is used for power amplifier at the transmitting end (as in claim 9).

As to claims 2, 6 and 10, Fujita el al disclose (see col. 15, lines 45-49) a thickness of the dielectric substrate between a conductor of conductor line 124 or transmission line (as in claim 6) of said matching circuit on the input side and said ground metal is composed of two or more layers wherein the high frequency circuit module is used for power amplifier at the transmitting end (as in claim 10).

4. Claims 1, 2, 5, 6, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Eda et al. US Patent No. 5,387,888.

Eda et al disclose in fig. 7 a high frequency circuit module provided with two or more-layer dielectric substrate 302, 302', 311, 311', 312 a semiconductor element 309 and matching circuits on the input side 331 and on the output side 331' respectively of the semiconductor element respectively formed on the dielectric substrate, and ground metal 303, 304 wherein: a thickness of the dielectric substrate between a conductor of conductor line 107' of said matching circuit on the output side and said ground metal is

composed of two or more layers wherein the high frequency circuit module is used for power amplifier at the transmitting end (as in claim 9).

As to claims 2, 6 and 10, Eda et al disclose in fig. 7 a thickness of the dielectric substrate between a conductor of conductor line 107 or transmission line (as in claim 6) of said matching circuit on the input side and said ground metal is composed of two or more layers wherein the high frequency circuit module is used for power amplifier at the transmitting end (as in claim 10).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyagawa et al in view of Ohnuki et al. 5,554,960.

Miyagawa et al. disclose all the claimed subject matter, but do not specifically disclose a low noise amplifier. However, Ohnuki et al disclose in fig. 4 a communication device wherein a module is used for a low noise amplifier 71 at the receiving end. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate the teaching of Ohnuki et al with Miyagawa et al, so that amplifying function could be realized.

Allowable Subject Matter

7. Claims 3, 4, 7, 8, 11, 12, 15 and 16 are allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Miyazaki et al. US Patent No. 6,335,669 disclose an RF circuit module used for high power amplifier and low noise amplifier.

b. Mochizuki (EP 840 443) discloses a high-power amplifier comprising a multi-dielectric layer.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A. Sefer whose telephone number is (703) 605-1227.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J Flynn can be reached on (703) 308-6601.

ANS
March 3, 2002